



Australian Bureau of Statistics

1216.0.55.005 - Review outcomes for Australian Statistical Geography Standard (ASGS), 2020

Latest ISSUE Released at 11:30 AM (CANBERRA TIME) 16/09/2020 First Issue

Summary

Overview

Overview

The Australian Statistical Geography Standard (ASGS) is a collection of geographic boundaries for the analysis of statistical data. It is used by the Australian Bureau of Statistics (ABS) and other organisations to publish, compare and analyse statistics from a geospatial perspective. The first edition was released in 2011 and replaced the previous Australian Standard Geographical Classification (ASGC).

This paper outlines key changes that will be applied to the Australian Statistical Geography Standard – Edition 3 (ASGS Ed. 3), due for publication in mid-2021. Changes have been identified via public consultation and as a result of routine review.

Key outcomes

- Both Urban Centres and Localities (UCLs) and Remoteness Areas will be produced using the same methodology as in previous editions.
- An experimental release of UCLs and Remoteness Areas will be created using new methodology. This will not be part of the official ASGS Ed. 3.
- SA1 and SA2 geographies will use full length hierarchical codes as the primary unique identifier. The shortened version of codes will no longer be a primary identification key. Support will be available to users who need to transition away from using short codes.
- ASGS Ed. 3 will use the Geocentric Datum of Australia 2020 (GDA2020).
- Commonwealth Electoral Divisions and State Electoral Divisions will now be constructed from Mesh Blocks rather than SA1s.
- Destination Zones will be officially included as part of the Non ABS ASGS Structures.
- Natural Resource Management Regions (NRMRS) are not currently planned to be included in ASGS Ed. 3.

Public consultation

In 2019, the ABS conducted public consultation on the ASGS via the ABS Consultation Hub. Survey questions asked for feedback on proposed changes, as well as information on how stakeholders use the ASGS. The consultation survey was open for 7 weeks, closing on 15 July 2019. In this time, a total of 75 submissions were received. A breakdown of responses can be found at the ABS Consultation Hub.

Directions for 2021

Directions for 2021

Classification name

In 2021, the ASGS will be re-named *Australian Statistical Geography Standard – Edition 3 (ASGS Ed. 3)*. Until this point, the ASGS has been named according to the Census year it referred to. This has led to confusion as the whole ASGS is published across several years. For example, volume 4 of ASGS 2016 was published in 2017.

Release schedule

The ASGS will be progressively released from July 2021 onwards. This timing reflects the availability of the different data inputs required to produce each classification.

Section of ASGS	Expected release
Main Structure	July 2021
Indigenous Structure	September 2021
Non ABS Structures	September 2021
Significant Urban Areas, Urban Centres and Localities, Section of State	Late 2022
Remoteness Structure	Early 2023

Experimental release	Expected publication date
UCLs and Remoteness Areas	TBA

Geocentric Datum of Australia 2020

ASGS Ed. 3 digital boundaries will use the Geocentric Datum of Australia 2020 (GDA2020), replacing GDA94. Adopting GDA2020 increases the accuracy of the ASGS. In 2020, the coordinates of any given point on the ground will differ by 1.8 meters between GDA2020 and GDA94. GDA2020 was adopted as the new official national datum in 2017 and has since been implemented gradually by organisations across Australia.

For more information about GDA2020, please refer to the Intergovernmental Committee on Surveying and Mapping or Geoscience Australia.

Access to digital boundaries and correspondences

ASGS Ed. 3 digital boundaries and correspondences will be available for download from the ABS website in ESRI Shapefile and GeoPackage formats. The ABS no longer release boundaries in MapInfo TAB or MapInfo midmif formats. Once published, ASGS Ed. 3 digital boundaries will also be available on data.gov.au in GeoPackage format. Currently, all historical ASGC and ASGS boundaries from 1981 to 2016, as well as correspondences, allocation files and coding indexes, are also available in this location.

Correspondences continue to be a critical piece of geospatial analytical infrastructure for our customers. Sometimes called concordances, they allow users to transform data between different geographic regions. There are a wide range of correspondences available on both the ABS website and data.gov.au. Updated correspondences will be provided to accompany ASGS Ed. 3 boundaries as they are released. Correspondences are increasingly available in a machine-readable CSV format and the ABS is continuing to explore new methods of making correspondences more readily accessible and user friendly.

Access to data

2021 Census of Population and Housing data will be released on ASGS Ed. 3 geographies via the ABS website and 2021 Census products and services. More details relating to Census products and services will be released on the ABS website closer to the 2021 Census. Other ABS data will move to ASGS Ed. 3 from July 2021 onwards.

Main Structure

Main Structure

As with previous editions, ASGS Ed. 3 will provide information about the stability and extent of change in the Main Structure between 2016 and 2021. The greatest amount of change will occur in the Mesh Block, SA1 and SA2 geographies, which are being split in areas with high population growth.

Feedback has been considered in the design process for ASGS Ed. 3. During consultation:

- 25 respondents provided specific feedback regarding ASGS boundary design

- 27 comments were received regarding more general ASGS improvements

The ABS is also addressing coastline alignment issues and undertaking an update of the Mesh Block category information. Updates are occurring to rectify issues reported by users since 2016 where this is possible within the design guidelines.

As with previous editions, the ABS will provide correspondences to help transfer data between ASGS 2016 and ASGS Ed. 3.

There are no major changes planned for SA3, SA4 or Greater Capital City Statistical Area (GCCSA) boundaries in ASGS Ed. 3. However, minor alignment shifts will occur to these boundaries as a result of alignment changes in lower level geographies. These small changes will have a minimal impact on population and as a result there will be no code or name updates.

SA4 and GCCSA boundaries represent labour markets and the functional extent of Australian capital cities respectively. They are designed with an emphasis on stability over time to support the time series of statistical releases such as the Quarterly Labour Force publication. Both SA4 and GCCSA boundaries will be reviewed for ASGS Ed. 4 to be released in 2026. There will be future consultation to assist in this process.

Coding structure

The ASGS Main Structure will use full length hierarchical codes as the primary unique identifier. The alternative short version of codes, often used for SA1 and SA2 boundaries, will no longer be provided as a primary identification key to reduce confusion created by having two different unique identifiers. Respondents to public consultation were generally supportive of this change. The ABS will provide short codes on request to support stakeholders to transition to the full length hierarchical codes. Short codes will also be stored as an attribute field in the SA1 and SA2 tables.

Naming conventions

During the design process for ASGS Ed. 3, naming conventions for SA2 boundaries have been reviewed, considering feedback from users. Full naming conventions will be outlined in ASGS Ed. 3.

Some of the changes include:

- The character limit for SA2 names will be increased from 40 to 50. This aligns with other ASGS structures.
- A number of SA2s surrounding towns called "X Region" will be revised to "X Surrounds" where the SA2 does not contain the town named. For example, the SA2 of Young is currently surrounded by a separate SA2 called Young Region which does not include the town. This SA2 will become Young Surrounds, which is a more accurate reflection of the area it refers to.

Indigenous Structure

Indigenous Structure

Some specific improvements are being made to the boundaries of a small number of Indigenous Locations and Indigenous Areas. These improvements have been made via close collaboration with the ABS Centre for Aboriginal and Torres Strait Islander Statistics (CoATSIS). They will ensure that the boundaries better reflect Aboriginal and Torres Strait Islander communities.

In November 2018, CoATSIS engaged in consultation to ensure that the Indigenous Structure (Australian Indigenous Geography Standard) effectively represents the Aboriginal and Torres Strait Islander population. While there are no major changes planned for ASGS Ed. 3, a small number of priority issues raised through this consultation have been addressed. In addition to the CoATSIS survey, the ABS will conduct ongoing consultation to improve the use of the Indigenous Structure for ASGS Ed. 4 in 2026.

Non ABS Structures

Non ABS Structures

The update schedule for some Non ABS Structures will change slightly:

- The ABS will continue to release Local Government Areas annually, generally in July
- State Electoral Divisions and Commonwealth Electoral Divisions will be updated only in years where there have been electoral redistributions.

The ABS will support users accessing data on redistributed boundaries outside of this release schedule through the provision of allocation and correspondence files. Changes to geographies with a five yearly update schedule will also be supported using correspondences.

Non ABS geography	Update schedule
Local Government Areas (LGA)	Annual
State Electoral Divisions (SED)	Annual (only when redistributions have occurred)
Commonwealth Electoral Divisions (CED)	Annual (only when redistributions have occurred)
Postal Areas (POA)	2021 – Every five years
Tourism Regions (TR)	2021 – Every five years
Australian Drainage Divisions (ADD)	2021 – Every five years
Suburbs and Localities (SAL)	2021 – Every five years
Destination Zones (DZN)	2021 – Every five years

State Electoral Divisions and Commonwealth Electoral Divisions

Both State Electoral Divisions and Commonwealth Electoral Divisions will be constructed from Mesh Blocks rather than SA1s. A majority of consultation respondents were supportive of this change as it will result in more accurate approximations of electoral boundaries.

Natural Resource Management Regions and Australian Drainage Divisions

Natural Resource Management Regions (NRMRs) are not currently planned to be included in ASGS Ed. 3. Responses to consultation suggested that NRMRs are rarely used by ABS data users and there are no ABS statistical releases currently planned for NRMRs. It will still be possible to obtain ABS data on these boundaries through statistical consultancies.

The ABS will continue to include Australian Drainage Divisions (ADDs) in ASGS Ed. 3 and these will be approximated using Mesh Blocks.

Destination Zones

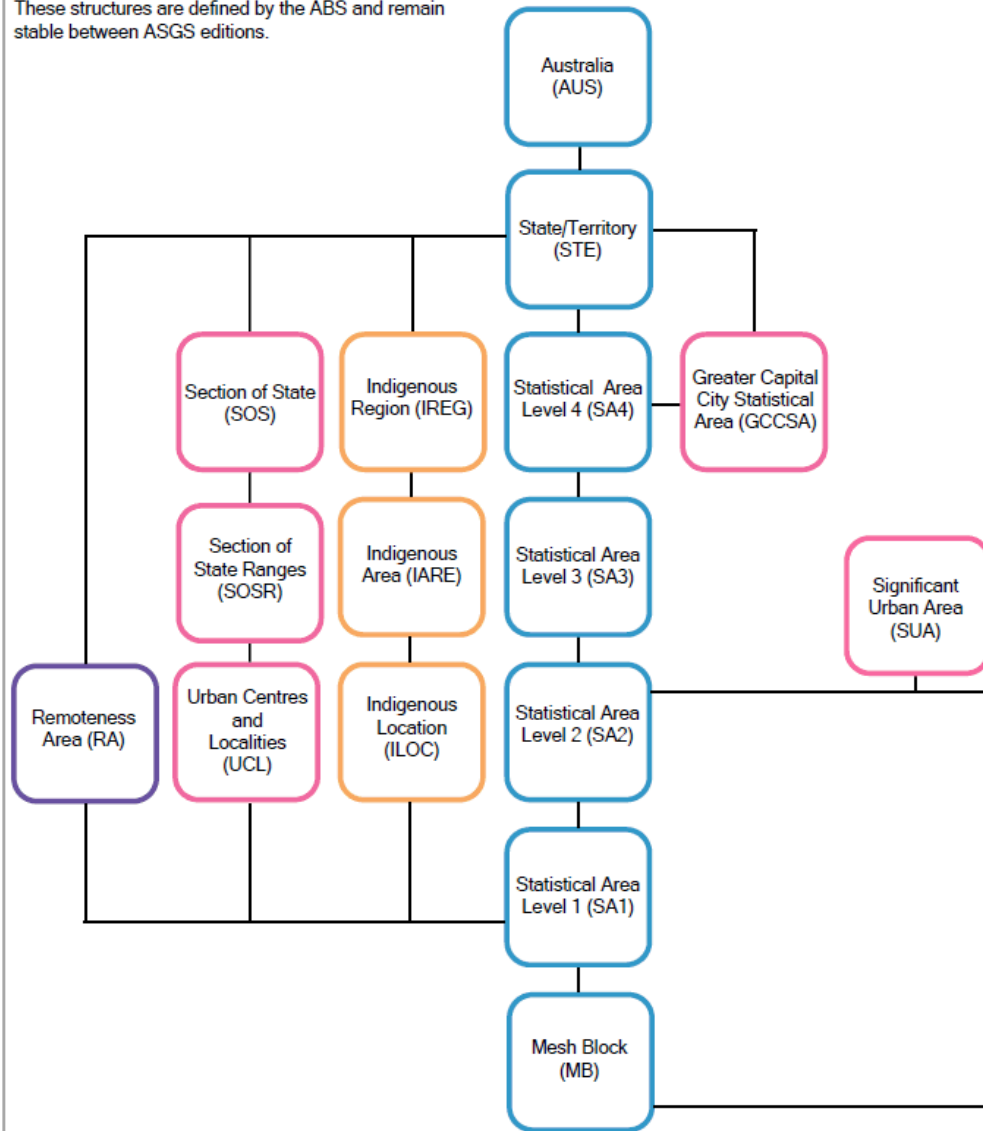
Destination Zones will be officially incorporated into ASGS Ed. 3 as part of Non ABS Structures. The ABS already provide extensive support to construct Destination Zones which will facilitate their incorporation into the official ASGS. Destination Zones are aggregated from Mesh Blocks and designed in collaboration with the State and Territory transport authorities. These boundaries are used to release Place of Work based statistics from the Census.

Changes to Non ABS Structures discussed in this paper are shown on the ASGS diagram below.

The Australian Statistical Geography Standard (ASGS) Edition 3

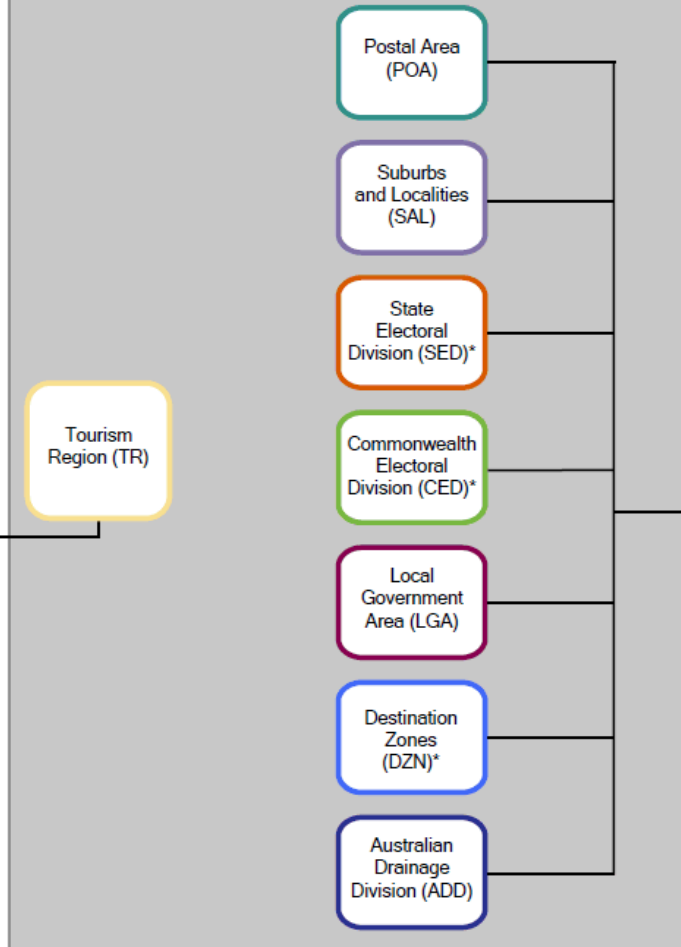
ABS Structures

These structures are defined by the ABS and remain stable between ASGS editions.



Non ABS Structures

These structures are not defined by the ABS and are approximated using regions from the ABS Main Structure. These may be updated annually.



*Change for ASGS Edition 3

Urban Centres and Localities classification

Urban Centres and Localities classification

The ABS will continue to build Urban Centre and Locality (UCL) boundaries from SA1s using the same criteria as previous ASGS editions. For more information about UCL criteria, please see 1270.0.55.004 – Australian Statistical Geography Standard (ASGS): Volume 4 – Significant Urban Areas, Urban Centres and Localities, Section of State, July 2016.

Remoteness Structure

Remoteness Structure

There will be no criteria or methodology changes to the Remoteness Structure in ASGS Ed. 3. Remoteness Area boundaries will be constructed using the same method as previous editions of the ASGS, which are outlined in 1270.0.55.005 – Australian Statistical Geography Standard (ASGS): Volume 5 – Remoteness Structure.

Experimental Urban Centres and Localities and Remoteness Areas

Experimental Urban Centres and Localities and Remoteness Areas

The ABS plan to release experimental Urban Centre and Locality (UCL) and Remoteness Area boundaries using alternative methods and criteria in addition to the official boundaries. The purpose of these experimental boundaries is to more accurately and consistently define the extent of urban areas and to allow users to access data about populations or businesses in peri-urban areas. Key features of the alternative methods and criteria being proposed are:

- Experimental UCLs will be constructed from Mesh Blocks of urban character, rather than SA1s
- Mesh Blocks are considered to be urban in character if they have a population density of 200 persons per sqkm or greater, or if they contain urban infrastructure such as schools, hospitals or commercial precincts
- Non-contiguous UCLs will be permitted
- A new *Rural Residential* category will be assigned to Mesh Blocks outside of UCLs, where the Mesh Block has a population density of 25 persons per sqkm or greater. This category will provide a consistent definition for users to access data about populations or businesses in residential areas outside urban centres or localities.

Further information about the methods and criteria will be provided in the experimental release which will include:

- Digital experimental UCL boundaries, with the new Rural Residential category included as part of an experimental Section of State classification
- Digital experimental Remoteness Area boundaries derived from the experimental UCLs
- Provision to access some Census data aggregated to these experimental boundaries
- Analysis of the differences between official and experimental UCL and Remoteness Area boundaries

These experimental UCL and Remoteness Area boundaries will not be an official part of ASGS Ed. 3 and will be released at a later date in a separate publication clearly marked as experimental to differentiate them from the official areas. Through this experimental release, the ABS will provide users and stakeholders a chance to evaluate the utility of the new methods and criteria prior to potential implementation in ASGS Ed. 4, scheduled for release in 2026. The ABS also wishes to minimise confusion to users and stakeholders by clearly labeling this release as experimental.

The reasons for releasing the experimental boundaries in addition to official boundaries are:

- To provide time series and methodological stability for ASGS Ed. 3 while the proposed criteria are being evaluated
- To allow users to evaluate how the proposed criteria will affect UCLs for the whole of Australia and provide detailed feedback to the ABS
- To allow users to explore innovative uses for the proposed new Rural Residential classification
- To allow the ABS to identify any unforeseen issues arising from applying the new UCL criteria.

Consultation on Experimental Urban Centres and Localities and Remoteness Areas

During consultation in 2019, test Urban Centre and Locality (UCL) boundaries for a subset of Australia were provided to users for evaluation. Most users were supportive of the proposed changes, however a number of potential issues were raised. These included concerns about:

- Stability over time
- Data availability at the Mesh Block level
- The impact of discontinuous UCLs, particularly on determining Remoteness Areas
- The appropriateness of the proposed population density threshold for a new Rural Residential category

Although the change in criteria will result in a change in time series, UCLs by definition are a dynamic geography, designed to accurately reflect the extent of urban areas in Australia. ABS data will be available to users at the UCL level regardless of the building blocks from which they are aggregated.

Some stakeholders queried the process for determining a Rural Residential population density criteria of 25 persons per sqkm. A range of methods using cadastre (land parcel) size, address point density and population density were tested. On balance, a threshold of 25 persons per sqkm was found to most consistently differentiate rural residential areas from other regions with distinct rural or urban characteristics.

Investigation has also been undertaken regarding the concerns over having discontinuous UCLs. One key concern was the potential impact of these on Remoteness Areas. The ABS conducted a test revision of Remoteness Areas for part of Australia in collaboration with the Hugo Centre for Population and Housing. There were a small number of changes in Remoteness Area boundaries resulting from changes to UCLs, however these were not widespread.

The ABS was also able to determine that the current criteria for Remoteness Areas is still meaningful, regardless of changes to the UCL criteria. Experimental Remoteness Areas will be included in the experimental release to ensure that users have a clear idea of how Remoteness Areas will be affected.

Following the experimental release, the ABS will conduct further consultation with stakeholders to decide whether the alternative methods and criteria should be adopted for ASGS Ed. 4 in 2026.

About this Release

Information paper detailing decisions made following consultation for the next release of the ASGS in 2021